

## ABSTRACT OF THE DISCLOSURE

Four channel signals (3a-3d) are input into a transmitter unit (1). The channel signal (3a) includes ATM cell-base flow, and is input into a  
5 channel identifier adding circuit (4), in which a HEC byte in PLOAM cell is inverted. As a result, the channel signal (3a) is turned into a reference channel signal (3x). The reference channel signal (3x) as well as the channel signals (3b-3d) is input into a multiplexing circuit (5), in which the reference channel signal (3x) is time-division multiplexed in every bit. The thus  
10 multiplexed reference channel signal is transmitted as a time-division multiplexed transmission signal (6) to a channel identifying circuit (8) in a receiver unit (7), and then, is separated into channels. The channel identifying circuit (8) detects the reference channel signal among the four channel signals, based on the fact that HEC byte in PLOAM cell is inverted,  
15 and identifies other channel signals, based on a difference in a phase between the reference channel signal (3x) and other channel signals. The thus identified channel signals are transmitted from the channel identifying circuit (8).

20 (Drawing to be published: Fig. 1)

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(21) 国際出願番号 PCT/JP99/03662  (22) 国際出願日 1999年7月7日(07.07.99)  (30) 優先権データ 特願平10/194519 1998年7月9日(09.07.98) JP 特願平10/247672 1998年9月2日(02.09.98) JP 特願平10/263125 1998年9月17日(17.09.98) JP  (71) 出願人 (米国を除くすべての指定国について) 日本電気株式会社(NEC CORPORATION)[JP/JP] 〒108-0014 東京都港区芝五丁目7番1号 Tokyo, (JP) (72) 発明者; および (75) 発明者/出願人 (米国についてのみ) 石川 肇(ISHIKAWA, Hajime)[JP/JP] 〒108-0014 東京都港区芝五丁目7番1号 日本電気株式会社内 Tokyo, (JP) (74) 代理人 天野 広(AMANO, Hiroshi) 〒108-0014 東京都港区芝4丁目6番4号 森村ビル2階 天野国際特許事務所 Tokyo, (JP)		(81) 指定国 US, 欧州特許 (DE, FR, GB)  添付公開書類 国際調査報告書
(54) Title: <u>TIME DIVISION MULTIPLEX TRANSMISSION SYSTEM, AND COMMUNICATION SYSTEM USING TIME DIVISION MULTIPLEX TRANSMISSION ACCESS METHOD</u>  (54) 発明の名称 時分割多重伝送システム及び時分割多重アクセス方式を用いた通信システム  <div data-bbox="500 1325 1203 1675" data-label="Diagram"> </div> (57) Abstract Four channel signals (3a to 3d) are inputted into a transmitter (1). The channel signal (3a) is an ATM cell base flow and inputted into a channel identifier adding circuit (4). The HEC byte of PLOAM of the signal is inverted to generate a reference channel signal (3x). The reference channel signal (3x) is inputted into a multiplexing circuit (5) together with the channel signals (3b to 3d). The signals are subjected to time division bit multiplexing to generate a time division multiplex transmission signal (6), which is sent to a channel identifying circuit (8) of a receiver (7) and separated to signals for respective channels. The channel identifying circuit (8) detects the reference channel signal (3x) from the four channel signals based on the inversion of the HEC byte of the PLOAM cell and identifies all the channel signals based on the phase differences from that of the reference channel signal (3x). The identified channel signals are outputted from the channel identifying circuit (8).		